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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,581

09/17/2003

Charles E. Biss

270-109

3675

20874

7590

01/03/2006

WALL MARJAMA & BILINSKI
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EXAMINER

NGUYEN, KIMBERLY D

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary	Application No. 10/664,581	Applicant(s) BISS ET AL.	
	Examiner Kimberly D. Nguyen	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-23 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/20/05, 11/18/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

1. Acknowledgement is made of Amendment filed October 17, 2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-13, 16-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng et al. (US 5,567,934; hereinafter "Zheng") in view of Bockholt et al. (US 4,488,679; hereinafter "Bockholt").

Re claims 1, 6, 10-13, 19-20, and 22: Zheng a self-aligning structure for use in measuring the quality of an encoded indicium, comprising:

a hollow chamber (a shroud 20) comprising:

a first surface/ section defining a first aperture (a bottom opening 24), the first aperture representing a viewing area of an imager used to obtain an image of the encoded indicium (the shroud having side walls, wherein the lower edges of the each side walls define the bottom opening, see col. 2, lines 59+; col. 3, lines 21+; and see figure 1);

a second surface/section defining a second aperture (a top opening 26), the second aperture configured to support the imager (a CCD based camera 40, which is a two-dimensional array) in a position to obtain the image of the encoded indicium (see col. 3, lines 21+, col. 3, lines 40+ and figures 1-2);

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at least one source (an illumination apparatus device 80) of illumination situated within the hollow chamber, the at least one source of illumination configured to illuminate the encoded indicium (see col. 4, lines 3+ and figures 1-2); and

an illumination control (a controller 1 10) operatively coupled to control/monitor the at least one source of illumination (see col. 6, lines 23+ and figure 4);

the hollow chamber configured to be positioned adjacent the encoded indicium such that, when the encoded indicium is positioned within the viewing area (see figure 1), when an imager is supported in the second aperture (see figures 1-2), and when the at least one illumination source is properly controlled, the structure is self-aligned and the imager can obtain at least one image of the encoded indicium (see figures 1-2).

Zheng does not disclose the imager measuring the quality of parameter of the encoded indicium and the imager having a linear array of photosensitive element.

Bockholt discloses a code reading system including a hollow chamber (an exterior enclosure) configured to shut out ambient light when the chamber is positioned adjacent the encoded indicium, a light system, an image sensor (such as a photo diode, photo-transistor, or CCD) within the enclosure, an optical sensing means to signal approximate or coarse alignment of the reader with respect to the data field being read, and a switch to activate the entire system once a reader has been properly placed on and aligned over the material to be read Fine alignment of the code with respect to the reader is handled by firmware contained within the microprocessor system associated with the reader (see col. 2, lines 4+). When the hollow chamber configured to be positioned adjacent the encoded indicium (i.e., when the encoded

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indicium is positioned within the viewing area), the structure is self-aligned and the imager can obtain at least one image of the encoded indicium from which image the quality of the encoded indicium can be measured based on the satisfactory alignment with the code being read (see col. 4, lines 10+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the imager of the self-aligning structure which image the quality of the encoded indicium is measured based on the satisfactory alignment with the code being read, as taught by Bockholt, in the system of Zheng, in order to improve the code reading and to reduce the any possible errors in reading by the apparatus.

Re claim 2: wherein the hollow chamber is configured to exclude extraneous illumination (such as ambient light) when the imager is present and the hollow chamber is positioned adjacent the encoded indicium (see col. 4, lines 53+ and col. 6, lines 24+),

Re claims 3-5: wherein the hollow chamber is configured to support the imager in a defined position relative to the encoded indicium, e.g., a defined distance and a defined angle (see col. 7, lines 10+).

Re claim 7: wherein the hollow chamber is configured to remain mechanically stable when the imager is position within the second aperture (see col. 3, lines 19+ and figure 1).

Re claims 8-9 and 23: wherein the optical sensor configured to receive illumination from the at least one source of illumination for the purpose of confirming an illumination characteristic (such as an illumination intensity at a selected time) provided by the at least one source of illumination (col. 6, lines 10+).

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4. Claims 14-15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zheng as modified by Bockholt as applied to claim 10 above, and further in view of Seo et al. (US 5,600,116; hereinafter “Seo”). The teachings of Zheng as modified by Bockholt have been discussed above.

Zheng as modified by Bockholt teaches the quality of the encoded indicium can be measured based on the satisfactory alignment with the code being read, but fails to teach the specifics of an analysis module configured to provide a measure quality of a parameter of an encoded indicium undergoing verification to the same parameter of the reference encoded indicium.

Seo teaches an optical data reading device having an analysis module (an image processing unit 20) to perform a predetermined process on the signal (e.g., the light control unit controls the amount of light generated by the light source in accordance with a processing result obtained by the analysis module, thus providing a measure quality of a parameter of an encoded indicium verification based on the amount of the light generated by the light source) (see the abstract, col. 1, line 48 through col. 2, line 14; col. 4, lines 21+; and figures 3 and 9). The program for the imaging process and various data are stored in the memory 25 (see col. 4, lines 21+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the analysis module that providing the measure quality of a parameter of an encoded indicium, as taught by Seo, in the teachings of Zheng as modified by Bockholt, in order to provide an illumination arrangement with a uniform and proper brightness to the encoded indicium.

Response to Arguments

5. Applicant's arguments filed October 17, 2005 have been fully considered but they are not persuasive.

6. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "It is apparent that Zheng is not describing measuring an encoded indicium under conditions that are similar to a laboratory setting, because it would be unreasonable to deliberately cover over an indicium that one wanted to study in detail with a film that might impede or distort the very observation that one intended to make.") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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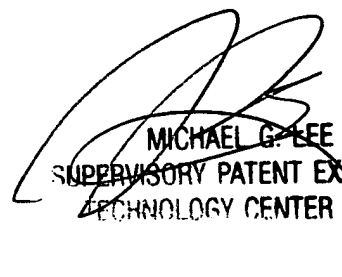
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly D. Nguyen whose telephone number is 571-272-2402. The examiner can normally be reached on Monday-Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KDN
December 27, 2005



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